

California Monthly Climate Summary October 2014

Weather Highlights

October 2014 was a warm and dry month for California. According to the Western Region Climate Center's [California Climate Tracker](#), the monthly average temperature was 62.2°F which is 3.9°F higher than the long-term average. With a statewide average of 0.70 inches, precipitation in October was 57% of average.

October started with dry weather over the entire State. Temperatures were cool with subfreezing temperatures recorded for minimums in the Sierra. In the southern part of the state, temperatures soared over 100 degrees Fahrenheit. High pressure limited any chance of precipitation. Dry conditions continued into week two with cooler temperatures in the north and hot conditions in the south. Precipitation finally made it into the state in the third week of the month although it was limited to the northern regions. More rain made its way into the state as the month closed out with the heaviest amounts on the northwest coast. Above normal temperatures continued to dominate over most of the state.

Preliminary records, reported on the National Weather Service Record Event Report, show that statewide there were 67 temperature records tied or broken and 7 precipitation records set for the month. Of the 67 temperature records set, 29 were for new high maximum temperatures and 38 were for new high minimum temperatures.

For the California Data Exchange Center's (CDEC) network of temperature gages used in this report, 100 stations recorded a minimum temperature below freezing in March while 32 stations reached or exceeded 100°F at least once during the month. Statewide extremes from the CDEC network of temperature gages are shown below. Also shown are the monthly average extremes from the CIMIS network. A table of regional average minimum, mean, and maximum temperatures from the CDEC stations is also shown at the end of the summary.

Precipitation in October was stratified with the northern part of the state receiving more than the southern part of the state. For the CDEC precipitation gages for October 2014, the largest amount of precipitation recorded was at Gasquet Ranger Station in the North Coast region with 13.28 inches. This is 176% of the average precipitation for this station the month. At the other end of the spectrum, 40 stations recorded no precipitation for the month. For the CIMIS network, Moraga in Contra Costa County topped the precipitation charts with 2.1 inches for the month and 26 stations recorded no precipitation. Some CIMIS gages may show large precipitation totals if the gages are not covered during irrigation activities so care should be given to review precipitation data used from this network. The 8-Station Index for northern California precipitation recorded 3.7 inches in October. On average, 3.0 inches of precipitation is recorded for the 8-Station index for the month. The San Joaquin 5-Station Index recorded 0.1 inches of precipitation for October. On average, 2.1 inches of precipitation is recorded for the 5-Station Index for the month.

CoCoRaHS Update

Water Year 2015 begins California's sixth year with CoCoRaHS – the Community Collaborative Rain, Hail and Snow Network. This group uses citizen volunteers to record rain, hail and snow data. The users enter the data online at the CoCoRaHS web site. The web site provides the opportunity to see spatial detail of rain and snow patterns. A map from October 25, 2014 is shown at the end of the document. As of the end of October, California has 1200 volunteers signed up spanning 55 of California's 58 counties. The counties without volunteers are Alpine, Colusa, and Modoc. The counties with the most volunteers are Sonoma with 105 and San Diego with 104 volunteers. For the month of October, 12,618 reports were recorded for California. The largest daily rain total for CoCoRaHS- CA in October was in Shasta County where 3.91 inches was recorded on 10/26/2014. There were 3 reports of snowfall recorded during the month with one each in Shasta, Placer, and Nevada Counties. Two hail reports were submitted for the month from Shasta County on 10/20/2014 and 10/25/2014. The largest stone size was 3/8 inch. To join CoCoRaHS or find more information, please visit <http://www.cocorahs.org>.

Snowpack and Water Supply Conditions

Water Year 2015 has begun. The Water Supply Index (WSI) for WY2014 for the Sacramento Basin and the San Joaquin Basin fell into the critical category. More information can be found at http://cdec.water.ca.gov/water_supply.html. A historical listing of water year categories for both basins can be found at <http://cdec.water.ca.gov/cgi-progs/iodir/WSIHIST>.

Drought Monitor and Seasonal Outlook

The maps for California for September 30, 2014 and October 28, 2014 are shown below. The Drought Monitor maps can be found on the National Drought Mitigation Center's (NDMC) website <http://drought.unl.edu/dm/>. These maps are largely a reflection of precipitation and soil moisture deficit estimates. As of the October 28th depiction, 58.41% of California is depicted in the D4 or exceptional drought category, 23.51% of California is depicted in the D3 or extreme drought category, and 13.12% of California is depicted in D2 or severe drought category and 4.96% of California is depicted in D1 or moderate drought. Maps are updated weekly.

The U.S. Seasonal Drought Outlook for November through January from NOAA depicts California in persisting drought throughout the state with the possibility of some improvement in the northwest and southern part of the state. This forecast is based primarily on climatology and forecast models. Maps and information can be found at

http://www.cpc.noaa.gov/products/expert_assessment/seasonal_drought.html.

Updates are provided twice per month.

For more information on water conditions in California, visit <http://www.water.ca.gov/waterconditions/>. A table showing end-of-October reservoir storage by hydrologic region is shown at the end of this document.

ENSO Conditions and Long-Range Outlooks

The El Niño/Southern Oscillation (ENSO) is currently in neutral conditions. Equatorial sea surface temperature anomalies for the tropical Pacific have been positive with values of 0.5°C in the Niño 3.4 at the end of October. The August through October 3-month running mean of the Ocean Niño Index (ONI) is 0.2. Five consecutive ONI values need to be above the 0.5 threshold need to be observed for classification as an El Niño event. Most forecast models have the tropical sea surface transitioning to El Niño conditions by the latter part of fall. More information can be found at the Climate Prediction Center's web site:

http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/enso_advisory/

Updates are posted weekly. The latest three month outlook (November through January) from NOAA indicates a higher probability for above normal temperatures for the State. For precipitation, a higher probability of above average conditions is forecast across the southern third of the state while equal chances of above or below average conditions are forecast for the rest of the state. Outlook plots and discussions can be found at <http://www.wrcc.dri.edu/longrang/>. General weather information of interest can be found at <http://www.noaawatch.gov/>. For anomaly information please see http://www.wrcc.dri.edu/anom/cal_anom.html.

Agricultural Data

October 2014 saw harvests continue to progress. Cotton fields progressing well with 85% rated good to excellent. Alfalfa, sorghum, and corn were harvested for silage. Rice harvest was nearly complete by the end of the month. Fall pruning of stone fruit orchards continued while kiwifruit harvest continued. Pomegranates were picked and packed along with olives and persimmons. Walnut and pistachio harvest continued while post-harvest clean-up of almond orchards took place. Early fall row crops including peppers, squash, eggplant, and pumpkin were harvested as well. Rangeland continued to deteriorate and supplemental feeding was a necessity. Some ranchers were hauling water for their livestock. For further crop information see <http://www.nass.usda.gov/index.asp>.

Other Climate Summaries

[California Climate Tracker](#) (new product of Western Region Climate Center)

[Golden Gate Weather Service Climate Summary](#)

[NOAA Monthly State of the Climate Report](#)

Statewide Extremes (CDEC)

High Temperature – 107°F (Beverly Hills, South Coast)

Low Temperature – 17°F (Charlotte Lake, Tulare)

High Precipitation – 13.28 inches (Gasquet Ranger Station, North Coast)

Low Precipitation – 0 inches (40 stations)

Statewide Extremes (CIMIS)

High Average Maximum Temperature –94.3°F (UC Andrade, Imperial County)

Low Average Minimum Temperature – 30.6°F (Alturas, Modoc County)

High Precipitation – 2.1 inches (Moraga, Contra Costa County)*

Low Precipitation – 0 inches (26 stations)

*Sometimes irrigation water from sprinklers gets counted as precipitation if the gage is not covered.

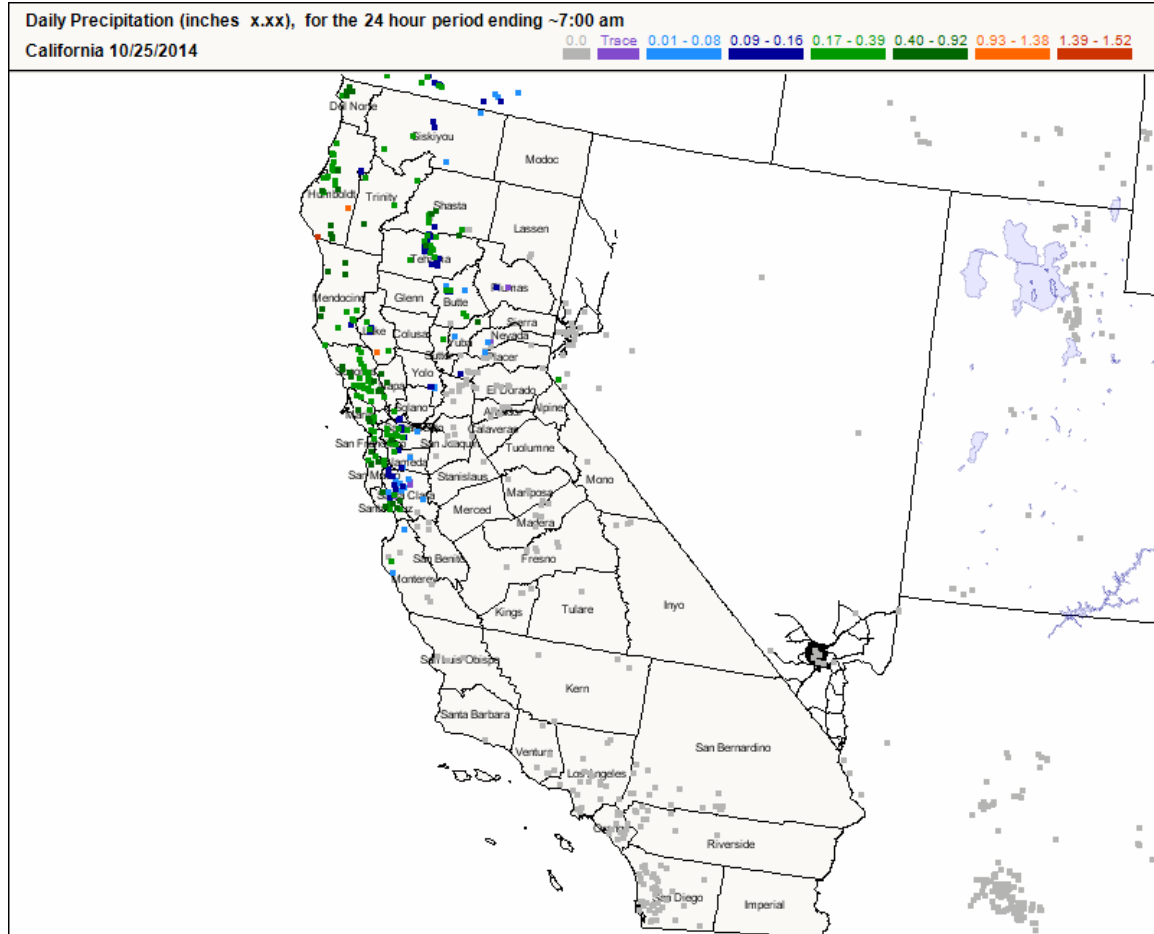
Statewide Mean Temperature Data by Hydrologic Region (degrees F)

| Hydrologic Region | No. Stations | Minimum | Average | Maximum |
|----------------------------|--------------|---------|---------|---------|
| North Coast | 28 | 36.8 | 56.1 | 88.9 |
| SF Bay | 8 | 46.8 | 65.7 | 92.4 |
| Central Coast | 13 | 42.3 | 65.3 | 97.5 |
| South Coast | 45 | 46.9 | 67.9 | 96.4 |
| Sacramento | 71 | 35.9 | 57.6 | 89.8 |
| San Joaquin | 43 | 35.4 | 57.1 | 84.9 |
| Tulare Lake | 18 | 32.8 | 54.9 | 79.8 |
| North Lahontan | 27 | 25.7 | 47.6 | 72.3 |
| South Lahontan | 17 | 32.3 | 53.9 | 79.1 |
| Colorado River Desert | 7 | 55.3 | 77.4 | 101.0 |
| Statewide Weighted Average | 277 | 37.2 | 58.2 | 88.2 |

End-of-October Reservoir Storage by Hydrologic Region
Storage in Thousand Acre-Feet (taf)

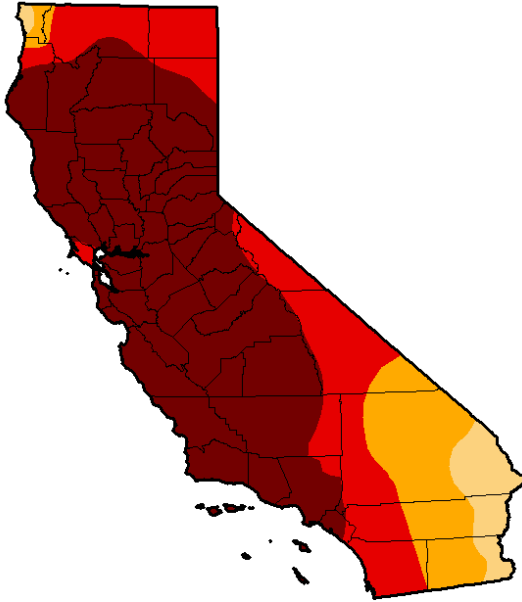
| End-of-October Reservoir Storage | Number of Reservoirs | Average Storage (taf) | 2014 Storage (taf) | % of Average |
|----------------------------------|----------------------|-----------------------|--------------------|--------------|
| North Coast | 6 | 1,894 | 779 | 41% |
| San Francisco Bay | 17 | 402 | 374 | 93% |
| Central Coast | 6 | 524 | 154 | 29% |
| South Coast | 29 | 1,285 | 821 | 64% |
| Sacramento | 43 | 9,493 | 5,714 | 60% |
| San Joaquin | 34 | 6,176 | 3,395 | 55% |
| Tulare | 6 | 637 | 249 | 39% |
| North Lahontan | 5 | 465 | 74 | 16% |
| South Lahontan | 8 | 272 | 205 | 75% |
| Total | 154 | 21,151 | 11,767 | 56% |

CoCoRaHS Map



United States Drought Monitor

U.S. Drought Monitor California



September 30, 2014

(Released Thursday, Oct. 2, 2014)

Valid 8 a.m. EDT

| | Drought Conditions (Percent Area) | | | | | |
|---|-----------------------------------|--------|--------|--------|-------|-------|
| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
| Current | 0.00 | 100.00 | 100.00 | 95.04 | 81.92 | 58.41 |
| Last Week 9/23/2014 | 0.00 | 100.00 | 100.00 | 95.34 | 81.92 | 58.41 |
| 3 Months Ago 7/6/2014 | 0.00 | 100.00 | 100.00 | 100.00 | 78.97 | 36.46 |
| Start of Calendar Year 12/31/2013 | 2.61 | 97.39 | 94.25 | 87.53 | 27.59 | 0.00 |
| Start of Water Year 10/1/2013 | 2.63 | 97.37 | 95.95 | 84.12 | 11.36 | 0.00 |
| One Year Ago 10/1/2013 | 2.63 | 97.37 | 95.95 | 84.12 | 11.36 | 0.00 |

Intensity:

| | |
|---------------------|------------------------|
| D0 Abnormally Dry | D3 Extreme Drought |
| D1 Moderate Drought | D4 Exceptional Drought |
| D2 Severe Drought | |

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

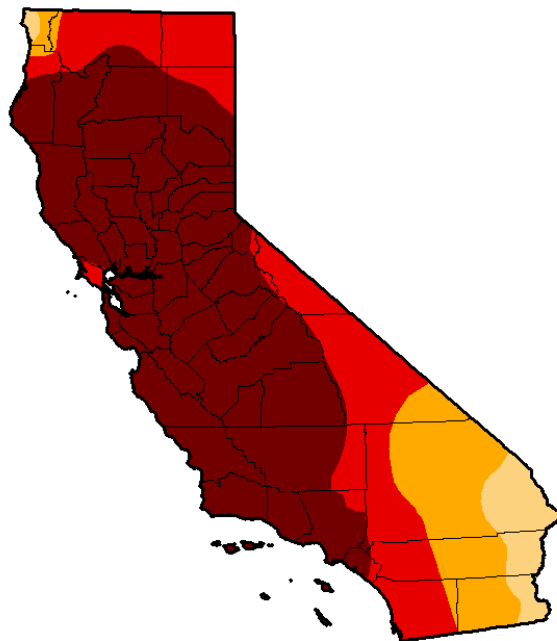
Author:

Richard Heim
NCDC/NOAA



<http://droughtmonitor.unl.edu/>

U.S. Drought Monitor California



October 28, 2014

(Released Thursday, Oct. 30, 2014)

Valid 8 a.m. EDT

| | Drought Conditions (Percent Area) | | | | | |
|---|-----------------------------------|--------|--------|--------|-------|-------|
| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
| Current | 0.00 | 100.00 | 100.00 | 95.04 | 81.92 | 58.41 |
| Last Week 10/21/2014 | 0.00 | 100.00 | 100.00 | 95.04 | 81.92 | 58.41 |
| 3 Months Ago 7/29/2014 | 0.00 | 100.00 | 100.00 | 100.00 | 81.89 | 58.41 |
| Start of Calendar Year 12/31/2013 | 2.61 | 97.39 | 94.25 | 87.53 | 27.59 | 0.00 |
| Start of Water Year 9/30/2014 | 0.00 | 100.00 | 100.00 | 95.04 | 81.92 | 58.41 |
| One Year Ago 10/29/2013 | 2.66 | 97.34 | 95.98 | 84.12 | 11.36 | 0.00 |

Intensity:

| | |
|---------------------|------------------------|
| D0 Abnormally Dry | D3 Extreme Drought |
| D1 Moderate Drought | D4 Exceptional Drought |
| D2 Severe Drought | |

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:

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<http://droughtmonitor.unl.edu/>